MINNESOTA WOODTURNER'S NEWS

April 1993

Membership Application and Renewal Minnesota Woodturners Association

Name (Please print)

phone

Address

Zip code

Mail to:

Dues are \$15 yearly (starting in Jan.) MN Woodturners Assoc but \$10 for new members joining after July 1. c/o Hal Malmlov Please check: Amount Enclosed____. Renewing member ____. New member____

3613 Belden Dr. Mpls. Minn. 55418

Minnesota Woodturners Association Officers

President	Don Wattenhofer	572-1045
Vice President	Chuck Pitschka	935-0660
Treasurer	Hal Malmlov	789-9616
Newsletter Editor	Paul Kachelmyer	738-3940
Membership list	William Allshouse	755-3373
Newsletter Mailing	John Patliff	770-6471
Librarian	Don Morcomb	420-5116
Program Director	James Tracy	571-3374

MN Woodturners Association 5312 Horizon Drive Fridley Minn. 55421





First off, I want to thank John Ratliff for handling the copying and mailing of the newsletters. He has been doing this for awhile now.

I also want to thank William Allshouse for keeping up the mailing list, and printing labels. A copy of the current list is being sent to all members with this newsletter. If there are any errors in your name or address, please contact William with corrections, 755-3373.

Safety:

Right up front, we wish to remind all members and guests, that woodturning can be dangerous. Many of our members have had accidents, and injuries, of some sort, with the lathe. This is a reminder, that by attending our meetings, or using information from our meetings, you do so at you own risk.

We now will be asking everyone attending a meeting to sign a "sign in sheet and liability release", for that meeting. This will include nonmembers, and will insure that everyone attending has signed a liability release.

Upcoming Meetings:

April 14, 1993, Wednesday 7:00 pm - 9:00 pm. Note, this is a Wednesday, not a Tuesday.

Our association is sponsoring a demonstration by the professional woodturner, Rod Croncite. Rod will be in town, selling his turnings at the American Crafts Council show at the Saint Paul civic center (Friday April 16 - Sunday April 18). I have attended the show in past years, and have been very impressed at the very high quality of artwork at it. Despite a \$5.00 admission charge, over 10,000 people typically attend the show.

I have seen Rod's work at past shows, and was quite impressed. He produces a variety of turnings, but specializes in large vases with very irregular tops.

The meeting will be held at the "Woodworking Unlimited" store at 1151 West Larpenteur Avenue, Roseville, 488-4177. This is located in the shopping center, about one block west of the corner of Larpenteur and Lexington. The store's hours for that day are 10 am to 8 pm. If you wish to shop there, please arrive before our meeting, as they will not be open for sales, after our meeting.

The demonstration will only be two hours long, so we will try to get started as quickly after 7:00 as we can. Note: We will have to charge \$5.00 to all people attending the demonstration. We will be asking people to pay at the door. Our Association will be paying the difference between Rod's fee, and the amount paid by attendees.

April 24, Saturday, 1:00 - 3:00.

We will be meeting at Don Wattenhoffer's shop to begin turning parts for the birdhouse that our association will be taking to this years American Association of Woodturner's national Symposium. This will be a hands on turning meeting. Hopefully everyone attending will have a chance to do some turning.

Don's house is located at 5312 Horizon Drive, in Fridley, Minn. The location is between University Ave. on the east, Main St. N.E. on the west, 53rd Ave N.E. on the south and I-694 on the north.

If you come via I-694, take the exit to go south at University Ave., turn right (west) onto 53rd Ave, which is the first intersection. Go two blocks and then turn right (north) on Horizon Dr. and Don's is the first house facing Horizon Dr. on the left.

Bring a chair.

May 1, Saturday, 9:00 am to 2:00 pm.

Tool Sale. This is not actually a meeting of the Woodturners Association, but an event that we thought might be of interest to members.

This is a flea market type of sale, with many sellers, selling many different types of used tools, woodworking tools included. Also, two of our members will be demonstrating turning at the sale. Dick Enstad will be demonstrating turning with his homemade treadle lathe, and Roger Abrahamson will be demonstrating turning with a spring pole lathe.

The sale will be at the intersection of East 48th street, and 4th Avenue south, in Minneapolis.

May 8, Saturday 1:00 - 3:00.

We will be meeting at Don Wattenhoffer's shop again for final turning, and assembly of the birdhouse for the AAW national symposium. Location and directions are the same as for the April 24th meeting.

May 18, Tuesday

Threading. Several of our members have made, or bought, devices that allow threads to be cut in hollow woodturnings. The threads are similar to those on a jar, and a lid, and allow pieces to be screwed together.

At this meeting several members will demonstrate, or talk about, their threading machines, and experiences.

The meeting will be held at "Woodcraft Supply" (884-3634), 9741 Lyndale Avenue South, Bloomington Minn. This is approximately 2 miles south of I-494 and 1/4 mile east of I-35W. The store hours for that day will be 9:00 - 6:00. They will be closed from 6:00 - 7:00, and will open at 7:00 for us. They will be open for sales to us during and immediately after our meeting.

June 5, Saturday 1:00 - 4:00

Tool Making. A couple of years ago, when Del Stubbs was here, he showed us how to make, and use, hooked tools. These tools have been around for hundreds of years, maybe thousands, and are especially useful when turning in endgrain.

We have received a lot of requests to have a meeting again on this subject.

William Allshouse has offered to give a meeting on this.

At this meeting everyone will have a chance to make a hook tool. We will cover the principles of grinding, bending, hardening, and tempering steel, for use as tools.

We will bring a supply of steel stock to the meeting for everyone to use to make the tools. The steel will be available for several dollars per piece. Please bring some money to buy what you will use.

Also, please bring your grinding wheels, or sanding machines, or whatever you use for tool sharpening (and extension cords).

Also, if anyone has a 4 inch angle grinder, with a grinding stone, or something similar, please bring that. They can remove steel much faster than standard grinding wheels. If you have an angle grinder, please call William, in advance, so he can plan for if he may have to rent some.

Please bring a chair, and any homemade tools that you may have, for show and tell.

June 19, Saturday, 9:00 am - 3:00 pm.

Professional woodturning demonstration by Vic Wood.

Vic is an internationally know, professional woodturner, with many years of experience, from Victoria Australia. His works have been featured numerous times in national, and international publications. He is an exceptionally talented and experienced woodturner, and artist.

Vic will be in the United States for a couple of months this year, and is giving demonstrations at the AAW national symposium, and a number of sites around the country.

The meeting will be held at John Magnuson's house in Hanover (about 20 miles northwest of downtown Minneapolis, see enclosed map, 477-6294).

Note: There will be a fee for this meeting. It is costing the association approximately \$700.00 to put on this demonstration. To recover a portion of that cost, we will be charging the following fees for the demonstration:

\$15.00 for members registering before June 5th.

\$20.00 for members registering after June 5th.

\$25.00 for nonmembers registering before June 5th.

\$30.00 for nonmembers registering after June 5th.

The registration form, and a map to the site, are included elsewhere in this newsletter.

Note: Nonmembers will be asked to sign a liability release, in order to attend the demonstration.

Please bring a chair, and a lunch, and a beverage. The lunch is real important, as the nearest eating place is many miles away.

Meeting sites:

The subject of meetings being far from where someone may live, comes up fairly often. Our membership includes people from all parts of the twin cities, and a number from far beyond the cities. It is not uncommon for people who live 150 miles apart to be at the same meeting. Because of this, it is pretty much impossible to have meeting sites that are conveniently located for all our members.

Several years ago we started to have more Saturday meetings to better accommodate members who have to drive long distances. This seems to be working out fairly well. Quite a number of members now carpool to meetings, if you don't, you may wish to check the membership list to see if someone lives near you.

We are always looking for new meeting sites. If you would be willing to let us meet at your house, or shop, please let us know. If you know of someplace near your home that we could meet at, please also let us know. The main reason why most meetings have been held at certain sites, is because that person or place, had enough space for us, and offered to let us meet there. We try not to wear out our welcome by meeting at any one site to often.

Demonstration costs.

In deciding to sponsor the two professional demonstrations this Spring, the costs of them was discussed extensively, at both regular meetings, and board meetings.

In the past, the costs of professional demonstrations has varied quite a bit. Some have cost the association quite a bit, some have broken even, and none have made money.

For several years now, the association members, and board have decided that it is reasonable to sponsor professional demonstrations, where the attendees would pay approximately half the cost, and the association, approximately half the cost.

The attendance fees for this years demonstrations have been set, based on this split.

Anyone who has checked into the availability, and cost, of quality woodturning instruction, around the country, has probably found that not only is it hard to find, but it usually costs more than \$100.00 per day, per person. It usually also would involve traveling great distances.

Many of us in the association have expressed gratitude, that by pooling our resources, we are able to bring in professional woodturners, at such a low rate for each member.

Past Meeting Minutes:

January 9, 1993, Saturday,

We met at Bill Thul's , woodturning shop, "In The Round", for a meeting that included demonstrations on three subjects: William Allshouse demonstrated making tool handles, Don Wattenhoffer demonstrated shear scraping techniques, and I demonstrated use of a chatter tool.

Chatter tool:

I started using a chatter tool just a couple of months ago, and was quite surprised at how easy it was to use. With very little practice it can be used to put fancy patterns on turnings.

Like most woodturning tools, the chatter tool can be purchased with or without a handle (\$10.00 versus \$30.00). The tool is a piece of spring steel, 3/8 inch wide, about 1/16 inch thick, and about 3 inches long. The steel comes to a point, and is bent slightly downwards. The handles that are sold with them are steel, about a foot long, and have a foam handle to absorb vibration. A handle can be made for one, by drilling a 3/8 inch hole in the end of a steel shaft, and also drilling, and tapping a hole from the side of the shaft. The spring steel piece is shoved in the end, and a screw through the tapped hole holds the piece in place.

Chatter work seems to work the best if it is done into the end grain of hard wood. It tends to show up best in woods that do not have much grain pattern. Maple and birch are a couple of good woods to use.

To use the tool:

Use normal turning tools to cut the surface of the wood as smooth as possible.

Point the tool slightly downward.

Point the tool at the surface of the wood, at as much of a right angle (perpendicular) as possible.

Press the point of the tool in to the spinning wood near its center.

Keeping the point up against the wood, move it toward the outside of the turning. During this process, which might only take a second or two, a loud squealing sound will be made by the tool.

The "chattered" surface that is produced, may be ready for applying a finish as is. The surface could also be burnished with a leather glove, a piece of wood, wood chips, or many other things.

An alternative finish might be to use magic markers, lightly touched to the chatterwork, to highlight the patterns. Large magic markers seem to work best for this, as small ones seem to stop working if their tips get heated up. The spinning tops that Bonnie Klien makes, are finished with magic markers.

Note: If you use a water based marker, the colors will smear and run if the top ever gets wet.

To vary the patterns of chatterwork:

- Change the speed of the lathe; faster seems to work better than slower.
- -Move the chatter tool from the outside of the piece to the inside.
- -Move the chatter tool at a nonconstant rate.

Shear scraping:

Unfortunately, shear scraping is one of those things that is very hard to describe in writing. It almost has to be tried, hands on, to be learned.

A number of us first saw shear scraping demonstrated by Del Stubbs when he was here a couple of years ago.

Don Wattenhoffer showed us a number of different ways that he does shear scraping.

Shear scraping is very useful, in that it can be used to get a very smooth surface on a turning. It can be used on both spindle work, and faceplate work, and on both green and dry wood. When properly done, it can greatly reduce, or eliminate, the need for sanding.

It is different than regular lathework scraping in the following ways:

- 1. Very fine cuts are made, removing very little wood.
- 2. Tools, other than standard woodturning scrapers, are usually used.
- 3. The tools are held against the wood at very different angles than normal woodturning scrapers.

The positioning of the shear scraping tool is a bit hard to describe, but I will try.

A normal latheworking scraping tool is usually used with it laying flat on the tool rest. A shear scraping tool is usually held at approximately 45 degrees to the tool rest.

A normal latheworking scraping tool is usually "pointed" straight at the wood, and "pointed" at approximately 5 degrees downward. A shear scraping tool is usually "pointed" at approximately 20 degrees to the wood, and approximately 20 degrees downward.

Note, there is a lot of variability with the above listed angles. You will have to experiment to find what works for you.

For a tool to be used for shear scraping, it must have a fine burr edge.

Don showed how he produced this fine burr, on the edge of a standard woodturning skew tool:

He sharpened the skew to a normal, sharp, knife type edge. He did this by hand, using a sharpening stone lubricated with mineral oil.

He then clamps the skew in a vise, to hold it securely. With a hardened metal burnishing tool, he rubs the edge of the skew (this takes only a second or two). The burnishing tool is held at an angle slightly to one side of perpendicular, to the skew's edge. Don puts a little oil on the burnisher before using it.

This process produces a fine burr on the edge of the skew. The burr should all be on one side of the edge of the skew. The side it is on is controlled by the angle the burnishing tool was at.

There was quite a discussion on commercially available burnishing tools. Some apparently are of very good quality, and some are not. Some other things that can be used as burnishing tools are the rounded part of an extra long, high speed steel, drill bit, and a three sided file with the teeth ground off. A burnisher should be so hard, that its surface is not marred when it is rubbed against steel.

Don has made several curved tools, that he uses for shear scraping the inside of bowls and hollow vessels.

Don also demonstrated using an ordinary cabinet makers scraper, for shear scraping on the lathe. It worked really well. These scrapers are flat pieces of hardened metal, that are approximately 4 inches by 6 inches. It was said that they usually cost about 5 dollars. "Sandig" was said to be a good quality, name brand scraper. An advantage of using these is that they have a very long burr, so it lasts longer between resharpenings.

Some disadvantages are:

They are lightweight, and may bounce around a bit.

Because of their shape and size, they might not reach as many parts of the turning as a smaller, latheworking, shear scraper.

As far as we know, there are not any latheworking tools, currently being sold, for use solely as shear scrapers.

Tool Handle making:

William Allshouse demonstrated making tool handles, and also discussed making tools.

William has found that tool handles on commercially available tools often do not suit his needs. Consequently he often will remove the handle, and make a new one.

Some of the problems with the handles are:

-To short to be held against your side, for support.

-A gripping area that does not conform comfortably to the hand.

-For small tools, a gripping area to big to be comfortably controlled by the fingers.

-For large tools, handles that are not heavy enough to absorb much vibration.

-For sets of tools, handles that all look alike, make it harder to quickly find a specific tool.

William made a small tool handle for a small tool. The process was:

Mount a piece of wood between centers and turn it round.

At the end near the tailstock, turn the wood to the exact size to hold a ferule. William did this, by using a caliper to measure the inside diameter of the brass bushing that he was going to use as a ferule, and then using the caliper to measure the diameter of the wood as he cut it.

Since the ferule was very small, William used a pointed, live center in the tailstock. The pointed live center, (instead of a cup, live center) allowed the entire end of the wood, to be cut quite small.

William then removed the wood from the lathe, slipped the ferule on the wood, and mounted the wood back on the lathe.

William then shaped the rest of the tool handle. Since the tool handle was going to hold a small tool, he made the area where the fingers would grip, very small. That way, the fingers would be better able to control tool movement.

William then sanded the handle. Sanding the ferule made it shinney and smooth.

He finished the tool with HUT wax.

To drill the hole for the handle, he turned the lathe to its lowest speed. He feels that drill bits heat up less, dull less, and drill straighter, at low speeds.

He mounted the drill bit in the 3 jaw chuck on the lathe. The length of the drill bit, and the tool handle necessitated the removal of the tailstock. Consequently, he held the tool handle by hand, while pushing it into the drill bit, to drill the hole.

William talked a bit about making tools. The primary requirement of steel for tools, is that it be very hard. Some commonly available material he has used have been old files, old planer blades, and concrete nails. He has also used high speed rods, and unhardened drill rod. The unhardened drill rod is fairly easy to grind to shape, but must be hardened and tempered, before it is used.

He brought one gouge he had made that I thought was quite ingenious. He drilled a hole straight into the end of a piece of unhardened drill rod. The rod was about 1/2 inch in diameter, and the hole was about 3/8 inch in diameter, and about 3 inches deep. He then ground off the whole side of the rod, for the length of the drilled hole. What was left looked almost exactly like a factory produced woodturning gouge. He then hardened and tempered it, and mounted it in a handle.

William usually tries to polish the inside, or top surfaces, of the tools he makes. To do this, he mounts a hard block of wood on the lathe, and turns it to match the shape of the surface to be polished. He then applies a little polishing compound to the wood. Pressing the tool up against the spinning wood, will polish it.

The polishing can make the tool much sharper, by removing small irregularities in the surface of the edge.

January 27, Wednesday,

Alan Lacer, President of the American Association Of Woodturners, was in town, and offered to give a talk and demonstration to us. I was not able to attend the meeting, so I do not have any notes for it. One of our members did videotape the meeting, so the tape should be available in our club library soon.

January 29 - 31:

Our club had a booth at the woodworking show that was held at the Minneapolis convention center. The purpose of the booth was to gain exposure for us, to local woodworkers. Thanks go to the many people who volunteered to staff the booth, and to demonstrate woodturning, with our portable lathe.

A number of people stopped at our booth, and expressed interest in joining the club.

Free woodworking demonstrations were being given as part of the show. Alan Lacer, President of The American Association of Woodturners, gave a demonstration on woodturning. Some hints that I got from the demonstration:

To keep a block of freshly cut wood from drying out, he wrapped it in clear cling type wrap (like Saran wrap).

He uses square head drive screws, to hold wood on to the face plate. He feels that the square head allows a much stronger force to be exerted by the screwdriver. He has found this especially important in unscrewing screws, as sometimes green wood seems to grip screws very tightly.

He likes to use #10, sheet metal screws.

He had a bowl gouge that had a dense rubber handle, that absorbed vibration very well. The rubber had come off of an industrial roller of some sort.

Alan demonstrated turning a bowl from green wood.

He talked about the different methods of sanding green wood. He said that if wood is sanded smooth, when it is wet, it often will

dry somewhat rough. To avoid this, the surface of the wood can be dried quickly with a hairdryer, and then sanded. This has some limitations though. It should not be done with thin turnings, because the wood may crack. It can be done on surfaces of thick turnings, like the outside of a bowl, before the inside is turned. It may be necessary to wet the surface after sanding, to prevent uneven drying, and cracking.

He said that there may be times when it may be desirable not to sand, and to leave tool marks on the wood. This can add character, and show that the turning was hand made. He said that one of his favorite woodturnings, is an antique wood bowl, that still has tool marks on it.

He felt that a good safety feature for woodturners, is good lighting, so you can always see what the tool is doing. For turning the inside of bowls, and vessels, he felt that a goose neck lamp, (or something similar) should be used to illuminate the interior.

Alan turned the bowl using a faceplate. After most of the turning was done, he was going to take it off of the faceplate, and mount it back on the lathe so he could turn its foot. He wanted to mark the exact center of the foot before he took it off of the faceplate. To do this, he unscrewed the faceplate from the lathe. He inserted a dead center into the morse taper of the headstock shaft. He then screwed the faceplate back on to the shaft, until the dead center poked the wood. The mark was made exactly in the center of the foot of the bowl.

To mount the bowl for turning the foot, he used the "reverse mounting" method that has often been demonstrated for us. The material he used between the drive mechanism, and the bowl's bottom, was a piece of dense rubber, that is sometimes sold as a router pad. It seems to me that this dense rubber could be used to hold wood in many "press fit" situations.

February 9, Tuesday,

We met at Don Morcomb's house to design a birdhouse for the 1993 AAW national symposium, in New York. The AAW had invited all AAW chapters to participate, by creating a birdhouse which can be mounted on a central pole. This is similar to the Totem pole project which was created for the 1990 AAW symposium.

I was not able to attend this meeting, but have been told that the meeting was productive, and that plans for quite an elaborate birdhouse were produced.

February 27, Saturday

At this meeting, Don Wattenhoffer and I, demonstrated turning wooden eggs. There wasn't an awful lot to say about turning the eggs, other than getting a pleasing shape is more difficult than it would seem. Really studying how eggs look, helps a bit. Two things seem to be important, related to their shape. One, is that the very ends of them should be fairly blunt, and not pointed. The second, is that some people seem to prefer the appearance of eggs that are slightly longer, and a little more cone shaped, than eggs really are.

March 9, Tuesday,

At his meeting several members talked about, and demonstrated, how they make pens, on the lathe.

I demonstrated making pens that use the inserts (writing part, and ink tube) from BIC pens. These are just the common, clear, BIC pens, that cost about 10 for a dollar.

The inserts are removed from the BIC pen by taking the little knob off the back, and pushing the insert out through the front, using a small shaft. I use a T handle allen wrench.

The diameter of the head of the pen is 5/32 of an inch. The length of the pen's ink tube is about 5 inches.

Thus, the insert will fit into a hole drilled in a piece of wood 5 inches deep, with a 5/32 inch diameter drill bit.

Seven Corners Ace Hardware, On west 7th street, in Saint Paul sells 6 inch long 5/32 drill bits for about \$2.50.

To make the pen, I drill the hole first. The drilling can be done on a drill press, or on some lathes. Long, thin drill bits tend to wander a little when drilling in wood. Consequently, after the hole is drilled you need to try to find where the opposite end of the hole really is. On my Shopsmith, I determine this by drilling the hole, and then switching off the motor, with the drill bit still all the way in the wood. With the wood suspended on the drill bit I move the headstock so that the wood contacts the point on the tailstock. This point seems to mark fairly well the true axis of the drilled hole.

Note, if the point on the tailstock is not perfectly aligned with the headstock, the above method will not work. The shopsmith tailstock is adjustable, and mine was initially about 1/8 inch off center. After turning for a couple years with it off center, it was amazing what a difference it made, when I finally found out about it, and took about a minute to adjust it properly.

I turn the pens with the drill bit itself driving the wood. When I was first told that a drill bit would have enough griping force

to drive the wood, I doubted it. I have found that it really does work, however there may be some slippage if you try to cut to much at one time. The drill bit can be held in a Jocobs chuck, or a 3, or 4 jaw chuck. I find that the end of the wood must be supported by the tailstock.

The shape you chose for the pen is entirely a matter of personal choice. For awhile, every pen I made had a different shape, with some fancy shape on the end. Now the shape I prefer is very plain, somewhat like a cigar, except more slender at the writing end.

I turn almost all of the pen, sand it, and finish it, before cutting off the end at the tailstock.

When the end is cut off at the tailstock, I support the turning with my gloved hand, and switch off the lathe. This is real important, because sometimes the drill bit is not really centered in the wood, and there can be a lot of wobble. The wobble can be great enough that it would bend, and break the drill bit, if it were not supported.

Mary Redig brought some pens to the meeting, that had a shape, that eliminated the need to cut their ends off, from the tailstock, with the lathe running. She left the end about 1/4 inch in diameter, and simply cut it with a saw, at an angle. I thought that it had quite a pleasing appearance.

Twist pens:

Ron Krietemeyer, and Mary Thouin, showed how they make wooden twist pens.

Craft Supplies, from Utah, sell kits containing the mechanical parts for pens that, when twisted, retract the point. They also have a clip on them, so they can be carried in a shirt pocket.

There was a lot of discussion as to the writing quality of the pens, and about getting replacement refills for them.

Their appearance is such, that it looks like "Cross" replacement refills would fit them. However Ron has found that "Cross" refills do not fit them. The refills have a small portion of threads, which must screw into the pen. It appears that "Cross" refills have a "Standard" thread, and the Craft Supplies pens have a "Metric" thread.

One of the people at the meeting said that "Burea Hardwoods" sells pen kits that do take the "Cross" refills. He said that he buys the pen kits from "Burea", throws away the refill that comes with them, and replaces it with a "Cross" refill. He felt that the quality of the "Cross" writing point, is worth the expense.

Ron also makes some felt tip pens that have a cover that comes off. He gets the kits for these from Craft Supplies. These kits do take

Cross refills. These kits also cost a little more than the twist pen kits.

Both "Burea", and "Craft Supplies" sell a mandrel kit to hold the wood pieces, for turning. The kits cost about \$20.00. The mandrel must be used with a cone tip, revolving tail center.

It looks like the pens should be real easy to make. However, both Ron and Mary told of many aspects of making them that are more difficult than it would seem.

Some suggestions:

A brass tube needs to be glued into the hole drilled in the wood. Ron does this before turning the wood, Mary does it after. The tube is glued in with superglue. Ron puts superglue on one end of the brass tube, sticks it part way into the hole, twists it, withdraws it, then sticks it all the way into the other end of the hole. He waits at least 15 minutes for the glue to dry, before working with the piece.

Ron advised lightly sanding the brass tube before gluing it to the wood. He feels that a better bond will result.

The mandrels come with short tubes that serve as a guide as to how thick to cut the wood. Apparently some kits come with brass tubes, and some with steel tubes. The brass tubes apparently wear down, after some use, and the steel tubes do not. For this reason it was thought that the steel tubes were better.

Burea sells a "Turboflute" 7mm drill bit for about \$7.00. This type of bit can drill deeper without plugging up with chips. Mary thought that the bit works well.

The ends of the blank of wood have to be sanded flat (perpendicular to the tube) before turning. There was quite a discussion on how Mary and Ron do this.

Mary uses a lot of light colored woods. She has found that many normal sandpapers, or wet dry sandpaper, can leave grey grit in the pores of the wood. She has found that 3M Trimite sandpaper does not discolor the wood.

To get the pocket clip to fit on the pen, a notch has to be cut into the turned wood. This usually has to be done by hand, although a dremal tool may also work.

Ron has experimented with several finishes. He tried Hut wax, but found that the surface gets dull after a few days of handling.

He tried the French polish from Craft Supplies, but found that it was hard for him to get an even finish with it.

He has had pretty good success with French polish using boiled linseed oil, and clear shellac.

Next Newsletter:

The next newsletter will probably not come out until August or September.

<u>CLASSIFIED ADDS</u>: Any member wanting to place an add, (free to members) send the pertinent information to me, Paul Kachelmyer, at 558 Farrell st. Maplewood Minn. 55119. I will try to get it in the next newsletter.

FOR SALE:

Arundel woodturning lathe. Made in England, 7 years old, perfect shape. Five step pulley 540 - 3231 RPM, 3/4 hp motor, cast iron headstock and tailstock, solid maple bed, 6 in 1 chuck, screw chuck, spur center, faceplates, #1 morse taper. Parts are available through "Garret Wade". \$700.00 call Chuck Pitschka 935-0660.

FOR SALE:

Light duty Sears lathe, some assessories, live tail center, \$100.00. Call William Allshouse, 755-3373.

FOR SALE:

Powercraft lathe, medium duty, long bed, approximately 60 inches between centers, mounted on wooden bench, live center, some assessories, \$300.00. Call William Allshouse, 755-3373.

Lost chair: Someone left a brown "movie directors" type chair at the meeting at John Magnusons house last year. It is now at Don Wattenhoffers house. If it is yours, please give Don a call.